

Claims

1 1. A display device including a display screen, and horizontal and vertical
2 display signals, the horizontal and vertical display signals to render an image
3 on the display screen, comprising:

4 a first and second accelerometers mechanically coupled to the display
5 screen;

6 a first and second compensation circuits to convert acceleration in
7 horizontal and vertical directions respectively to x- and y-compensation
8 signals;

9 first and second adders combining the x- and y-compensation signals
10 with the horizontal and vertical display signals to dynamically adjust a
11 location of the image on the display screen while the display device is
12 subject to movement.

1 2. The display device of claim 1 wherein the display screen is a cathode ray
2 tube and the compensation circuits operate in an analog mode.

1 3. The display device of claim 2 wherein the display signals are deflection
2 signals for the cathode ray tube.

1 4. The display device of claim 1 wherein the display screen is a digital
2 screen.

1 5. The display device of claim 4 wherein the display signals are address
2 signals for a frame buffer of the digital screen.

1 6. The display device of claim 1 wherein each compensation circuit further
2 comprises:

3 a first and second integrator to convert acceleration to position; and
4 at least one band-pass filter.

1 7. The display device of claim 6 wherein a low frequency cut-off of the band
2 pass filter is less than one half cycle per second, and a high frequency cut-off
3 is less than a refresh rate of the display screen.

1 8. The display device of claim 1 wherein each compensation circuit includes
2 a gain control circuit.

1 9. The display device of claim 1 further comprising a predictive controller to
2 anticipate the movement.